**Content Hub**

Terms of Reference

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Version 1.0

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# Document Information

**Revision History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Version** | **Status** | **Prepared by** | **Comments** |
| Jan 9, 2020 | 0.1 | Start | Team Galvatron | Initial Document |
| Mar 30, 2020 | 1.0 | Final submission | Team Galvatron | Final Document |

**Document Control**

|  |  |  |  |
| --- | --- | --- | --- |
| **Role** | **Name** | **E-mail** | **Telephone** |
| Project Manager | Tyler Nee | tyler.nee@gmail.com | 778-323-4899 |

# 

# Introduction

Within the Vancouver software development community, there is a lack of content for individual IT organizations to share in order to drive online traffic to their respective platforms. Thus, this project serves as a minimum viable product to build a platform that allows individuals to contribute and share content with the hopes of linking posts back to their platforms. The content will be filtered and managed by admins who approve and reject postings based on an approval system. With a HQ in Vancouver, Galvanize has decided to spearhead this project in order to tackle this problem.

# Project Information

## Description

The product will consist of a website that consolidates content and points to the content’s original location from other websites and repositories. The site will have admins from contributing organizations monitoring content published to the site via an admin approval system. The main interface of the website will contain a portal to access linked articles. Any individual will be able to create an account and submit content to the site subject to admin approval.

## **Deliverables**

* System architecture documents
* Source code for frontend web application and backend server
* Database setup script
* Deployment guidelines

## In **Scope**

### Technical Requirements

* Frontend: React, Javascript
* Backend: Node.js, Javascript
* Database: MySQL

### Functional Requirements

* Allow users to read the submitted articles via:
  + Logging into the web application and browsing the available blog posts
  + An RSS feed
* Allow users to search or filter by name of article, company or category
  + Categories are managed in the admin module of the system
* Allow users to contribute an individual article via a blog post link
  + Submission requires a title, and link to website/blog/repository
* Allow users to submit a blog stream via a blog stream link
  + Submission requires a title, and link to the blog stream
* Allow users to self register via Google OAuth2.0
  + Self registration requires users to login with their Google account.
* Users who have subscribed to the service should receive an email showing all newly approved articles
  + The frequency of these emails is a parameter that the user can change in their user profile.
* Allow admin members to change the role of users to User, Approver, Admin
* Allow admin members and approvers to vote and authorize content to be published
  + Approval threshold for submissions can be changed by admins
  + Anticipated approval threshold is 4 for public submissions
  + Anticipated approval threshold is 2 for admin member submissions
* Allow the scheduler to review approved blog streams and submit new posts.

### Non-Functional Requirements

* Max number of articles to be 5000
* Response times for searches/filters to be less than 4 seconds
* System can support at least 100 concurrent users
* Multi-browser support (Chrome, Microsoft Edge, Safari, Firefox)

## 

## Out-of-Scope (Stretch Goals)

* Website usage reports
* Posting articles to a twitter feed that people can subscribe to. Similar to LinkedIn, and perhaps Facebook.
* Displaying images alongside each post.

## **Constraints**

* Time (14 weeks, from Jan 7th to April 10th)
* Website package cannot be used
* Technology stack (NodeJS/Express, and/or React)

## **Assumptions**

* There is a maximum of 30 admins
* Maximum articles is 5000

## **Risk** Assessment

|  |  |  |  |
| --- | --- | --- | --- |
| **Assessment** | **Risk Level** | **Risk** | **Risk Mitigation** |
| Availability | Low | Illness or unplanned leave of group member(s) can lead to more work being done by other group members. | We will redistribute tasks so that an even workload is shared among all team members. |
| Uncertain assumptions | Medium | The project contains many assumptions without confirmation from the sponsor | We will continuously check our assumptions with the TA on a weekly basis to ensure that we have made the right assumptions. |
| Security | Medium | Team members do not have relevant experience with internet security. The product may have security vulnerabilities. | We will research into security vulnerabilities and get insight and feedback from our TA. |
| Changing requirements | High | Changing requirements may lead to additional and/or redundant work being done | We will redistribute our time on new requirements based on its priority. |

# Project Approach and Acceptance Criteria

## **Estimated Schedule**

|  |  |  |
| --- | --- | --- |
| **Milestone or Key Activity** | **Start** | **Complete** |
| Initiation | Jan 7th, 2020 | Jan 16th, 2020 |
| Requirements | Jan 17th, 2020 | Jan 28th, 2020 |
| Environment Setup | Jan 29th, 2020 | Feb 11th, 2020 |
| Implementation | Feb 12th, 2020 | Mar 31th, 2020 |
| Testing | March 20th, 2020 | April 7th, 2020 |
| Project Completion | April 1st, 2020 | April 7th, 2020 |

## 

## **Acceptance Criteria**

|  |  |
| --- | --- |
| **Criterion** | **How Measured** |
| Login Portal | Users are able to register and login to the application. |
| Approval System | User posted articles can be approved by administrators before being published. |
| Admin System | Admins are promoted by the site administrator. The maximum number of admin is 30. |
| Configuration Panel | Administrators can configure settings for the application. |
| Notification Service | Users subscribed should receive email notification of newly posted articles. |
| Scheduler | New posts from approved blog posts should be periodically submitted into the system. |
| Website Aggregator | Main page shows links to approved articles, which can be searched and filtered |

# Project Governance

## **Project Team Responsibilities**, **Struct**ure and Resources

|  |  |  |
| --- | --- | --- |
| **Project Role** | **Person Responsible** | **Responsibility** |
| Project Manager | Tyler Nee | Balancing work distribution among members, project planning, contacting TA and resolving conflicts. |
| UX/UI | Tony Kong, Pengwei Zhou | Designing graphical user interface. |
| Database | Vickie Yen, Pengwei Zhou | Defining the detailed database design and initial setup of the database. |
| Architect | Tony Kong | Determining coding standard and project structure. |
| Quality Assurance | Peter Han, David Guo | Assessing the quality of all specifications and technical design documents. |
| Devops | David Guo | Deployment of application and managing build automation. |
| Frontend | Peter Han, Yuting Wen, Tyler Nee | Structuring client side code and using the server APIs to retrieve and process data used by the UI. |
| Backend | David Guo, Vickie Yen, Tyler Nee | Creating APIs used by the clients and sending queries to the database. |

## **Project Communication Plan**

### Project Meetings

* Tentative Team meeting every Monday from 5:30 pm to 7:30 pm at DLC/X-wing
* Online meetings upon needs
* Thursday meeting with TA

Project Reporting

* Project reporting will be done with our TA on Thursday at an assigned time

## Project Cost

**Man hours**:

|  |  |
| --- | --- |
| **Item** | **Hours** |
| Architecture/Design | 80 hours |
| Implementation | 140 hours |
| QA Testing | 40 hours |
| Deployment | 20 hours |
| Total | 280 hours |

**Monetary costs**:

Project will be hosted on a free AWS EC2 instance and we do not anticipate any monetary costs with this project.

# Appendix

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